

REMARKS

In the February 9, 2005 Office Action, the Examiner noted an objection to the specification.

The Examiner also rejected claims 1-7, 9-13, and 16 under 35 U.S.C. § 102(b) by U.S. Patent 4,961,588 to Brienza.

The Examiner objected to claims 8, 14, 15, and 17, but indicated that these claims would be allowable if rewritten in independent form.

In view of the clarifications presented herein, it is respectfully submitted that all claims 1-17 are in condition for allowance. New claims 18-22 are also presented which are also believed to be in condition for allowance.

A. Objection to Specification Has Been Remedied

In accordance with the Examiner's suggestion, a typographical error has been corrected in the specification. The term "rube" has been corrected to "tube."

B. Rejection Under § 102(b) Must Be Withdrawn

The Examiner rejected claims 1-7, 9-13, and 16 under 35 USC §102(b) for purportedly being anticipated by U.S. Patent 4,961,588 to Brienza.

Upon closer review, it is respectfully submitted that the claims at issue are readily distinguishable from the disclosure of the '588 patent to Brienza. Specifically, independent claims 1 and 12 recite a "longitudinal sealing member." As shown in the figures and as described in the specification of the present application, this refers to the sealing member extending along at least a portion of the length of the kiln. See for example lines 16-27 of page 5 and Figure 4 of the application. Thus, the recitation of the longitudinal sealing member in claims 1 and 12 refers to the orientation of the sealing member with respect to the kiln, i.e. the sealing member extends along and seals at least a portion of the length of the kiln.

In contrast, Brienza discloses a "radial seal" which extends radially around a portion of the circumference of a kiln. This is evident from the arcuate shape of the seal, and as described in the specification of the '588 patent. Brienza entirely fails to disclose a longitudinal sealing member.

For at least these reasons claims 1 and 12, and claims 2-6 and 9-11; and 13 and 16 dependent therefrom, respectively, are all allowable over the Brienza patent.

Furthermore, many of the dependent claims recite additional aspects that are simply not disclosed by Brienza. Brienza entirely fails to disclose the tunnel wall as "bowl-shaped" as recited in dependent claim 2. Brienza entirely fails to disclose the sealing member as disposed below the rotatable tube as recited in claim 3. In fact, Brienza depicts his sealing assembly as positioned above the tube in Figures 2 and 3. Brienza entirely fails to disclose that the rigid portion of the sealing member be formed from a refractory material, as recited in claim 4. Brienza also fails to disclose that the flexible portion, i.e. item 10 in Figures 2 and 3 of the '588 patent, comprise "ceramic fibers" as recited in claim 5. Brienza also fails to disclose that strips of the sealing member are formed from "an elastic and compressible material" as recited in claim 9. Nor does Brienza disclose the stack arrangement of strips as recited in claim 10. Brienza also fails to disclose that the flexible strips are formed from "an elastic material" as recited in claim 13. For at least these reasons, each of these dependent claims is also readily distinguishable from the '588 patent to Brienza.

C. Objection to Claims 8, 14, 15, and 17 Must Be Withdrawn

Amendments have been made to remedy the previous rejection of these claims. Specifically, claim 8 has been amended to include the recitations from claims 1 and 6, from which it depends. Claim 14 has been amended to include the recitations of claim 12 from which it depends. Claim 15 has been amended to include the recitations of claim 12 from which it depends. And, claim 17 has been amended to include the recitations of claims 12 and 16 from which it depends. Accordingly, it is respectfully submitted that claims 8, 14, 15, and 17, as now amended and placed in independent form, are in condition for allowance.

D. New Claims 18-22

Applicant herein presents new claims 18-22 that are believed to recite patentable subject matter. New claims 18 and 19 are dependent from previously discussed independent claim 1 and so, are believed to be patentable over the '588 patent to Brienza. Claims 18 and 19 recite that the longitudinal sealing member extends to varying degrees,

along the length of the heating tunnel wall. In sharp contrast, Brienza merely discloses radial seals that extend around a portion of the kiln circumference.¹

New independent claim 20 recites, in part, that the sealing member includes a "rigid portion comprising a refractory material" and "a flexible portion disposed on a distal end of the rigid portion."

Neither of the embodiments disclosed by Brienza in Figures 2 and 3, disclose a rigid portion that is formed from a refractory material. Instead, the assembly 17 in Figures 2 and 3 of the Brienza patent is steel, as previously explained.

New claims 21 and 22 are both independent claims and recite additional patentable aspects. Claim 21 recites in part that the rigid portion comprises a refractory material and the flexible portion comprises a particular configuration of ceramic fibers. Brienza fails to disclose these aspects. claim 22 recites in part that the rigid portion comprises a brick wall and the flexible portion constitutes a crown disposed on the top of the brick wall. Such aspects are not disclosed by Brienza.

Notwithstanding the foregoing, all new claims 18-22 recite in part the "longitudinal sealing member."

E. Conclusion

For the reasons detailed above, it is respectfully submitted all claims in the application (Claims 1-22) are in condition for allowance.

¹ More specifically, Brienza discloses rotary kiln circumferential seal sections 10 each comprising a double spring steel plate 21, 22 sandwiching a heat resistant layer 20 (column 4, line 1 to 6 and 54 to 58 in connection with Figures 2a and 3). In the embodiment of Figure 3, these seal sections 10 are supported by a "support member 24 (such as steel bar), which is provided on the hot side (the left side of figure 3) of the steel section 10" (please see column 4, lines 56 to 58).



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Date

Respectfully submitted,

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